

CLAIMS

1. A data transmitter which transmits compressed video and audio data by serializing data having a structure composed of a pay-load part in which data including compressed video data is stored, a start sync code part disposed before the pay-load part and in which a start of active video code indicative of the start of the pay-load part is stored, an ancillary data part disposed before the start sync code part and in which information including audio data and auxiliary data are stored, and an end sync code part disposed before the ancillary data part and in which an end of active video code indicative of the end of the pay-load part, the apparatus comprising:

a controlling means for generating process information indicative of a process of processing video data in a receiver which receives serial data obtained by serializing the above data; and

a data generating means for generating data by storing the process information generated by the controlling means into the ancillary means;

the data including the process information generated by the data generating means and having the above data structure being serialized for transmission.

2. The apparatus according to claim 1, wherein the process information is sequence information indicative of an output sequence of the video data of the data.

3. The apparatus according to claim 2, wherein the sequence information indicates fields forming next video and audio data the receiver is to output.

4. The apparatus according to claim 2, wherein the sequence information is a combination of addresses corresponding to a plurality of storage areas, respectively, in a storage means provided in the receiver to hold, in each field thereof, a plurality of fields of the video and audio data.

5. The apparatus according to claim 1, wherein the data having the data structure is in a serial digital transport interface format defined in the SMPTE-305 standard.

6. The apparatus according to claim 1, wherein the compressed video data is an HDCAM signal.

7. A data transmitting method for transmitting compressed video and audio data by serializing data having a structure composed of a pay-load part in which data including compressed video data is stored, a start sync code part disposed before the pay-load part and in which a start of active video code indicative of the start of the pay-load part is stored, an ancillary data part disposed before the start sync code part and in which information including audio data and auxiliary data are stored, and an end sync code part disposed before the ancillary data part and in which an end of active video code indicative of the end of the pay-load part, the method comprising steps of :

generating process information indicative of a process of processing the video data in a receiver which receives serial data obtained by serializing the above data; and
generating data by storing the generated process information into the ancillary

means;

the data including the generated process information and having the above data structure being serialized for transmission.

8. The method according to claim 7, wherein the process information is sequence information indicative of an output sequence of the video data of the data.

9. The method according to claim 8, wherein the sequence information indicates fields forming next video and audio data the receiver is to output.

10. The method according to claim 8, wherein the sequence information is a combination of addresses corresponding to a plurality of storage areas, respectively, in a storage means provided in the receiver to hold, in each field thereof, a plurality of fields of the video and audio data.

11. The apparatus according to claim 7, wherein the data having the data structure is in a serial digital transport interface format defined in the SMPTE-305 standard.

12. The apparatus according to claim 7, wherein the compressed video data is an HDCAM signal.

13. A data receiver which receives serial data transmitted from a data transmitter which transmits compressed video and audio data by serializing data having a structure composed of a pay-load part in which data including compressed video data is stored, a start sync code part disposed before the pay-load part and in which a start of active video code indicative of the start of the pay-load part is stored,

an ancillary data part disposed before the start sync code part and in which information including audio data and auxiliary data are stored, and an end sync code part disposed before the ancillary data part and in which an end of active video code indicative of the end of the pay-load part, the apparatus comprising:

a storage means for holding the video and audio data; and

a reading sequence controlling means for controlling the sequence of reading the video and audio data held in the storage means based on process information stored in the ancillary data part and indicative of a process of processing the video data.

14. The apparatus according to claim 13, wherein the process information is sequence information indicative of an output sequence of the video data of the data.

15. The apparatus according to claim 14, wherein the sequence information indicates fields forming next video and audio data to be read from the storage means.

16. The apparatus according to claim 14, wherein:

the storage means consists of a plurality of storage areas which hold, in each field thereof, a plurality of fields of the video and audio data; and

the sequence information is a combination of addresses corresponding to the plurality of storage areas, respectively.

17. The apparatus according to claim 13, wherein the data having the data structure is in a serial digital transport interface format defined in the SMPTE-305 standard.

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18. The apparatus according to claim 13, wherein the compressed video data is an HDCAM signal.
19. A data receiving method for receiving serial data transmitted by a data transmitting method in which compressed video and audio data are transmitted by serializing data having a structure composed of a pay-load part in which data including compressed video data is stored, a start sync code part disposed before the pay-load part and in which a start of active video code indicative of the start of the pay-load part is stored, an ancillary data part disposed before the start sync code part and in which information including audio data and auxiliary data are stored, and an end sync code part disposed before the ancillary data part and in which an end sync code indicative of the end of the pay-load part, the method comprising steps of:
- holding the video and audio data in a storage means; and
 - controlling the sequence of reading the video and audio data stored in the storage means based on process information stored in the ancillary data part and indicative of a process of processing of the video data.
20. The method according to claim 19, wherein the process information is sequence information indicative of an output sequence of the video data of the data.
21. The method according to claim 20, wherein the sequence information indicates fields forming next video and audio data to be read from the storage means.
22. The method according to claim 20, wherein:
- the storage means consists of a plurality of storage areas which hold, in each

field thereof, a plurality of fields of the video and audio data; and

the sequence information is a combination of addresses corresponding to the plurality of storage areas, respectively.

23. The method according to claim 19, wherein the data having the data structure is in a serial digital transport interface format defined in the SMPTE-305 standard.

24. The method according to claim 19, wherein the compressed video data is an HDCAM signal.